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Title: Atomic tunes: The intersection of Lab science and popular music from 1945-1962 How American music was influenced by nuclear science

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Atomic tunes: The intersection of Lab science and popular music from 1945-1962

How American music was influenced by nuclear science

By Patty Templeton, archivist, [National Security Research Center](#)

Editor's note: This is the second story in a three-part series on the Lab's post-World War II influence on pop culture, which is a reflection of the public's understanding of scientific advancements following the dawn of the Atomic Age in 1945. Each story spotlights the Lab's legacy materials, including film and photos, from the weapons testing era that are now part of the National Security Research Center's collections.

The American public realized the magnitude at which the atom's power could be harnessed following the detonation of Little Boy and Fat Man in August 1945. World War II ended weeks later, but the Atomic Age had just begun.

Society contextualized nuclear science into pop culture as a way of processing the era's immense technological progress. Music, among other media, became a speculative arena for expressing the awe and angst evoked by splitting the atom.

From 1945 to the mid-1960s, a niche of songs, commonly referred to as "atomic tunes" or "atomic platters" (platter being another word for record), was a way to understand groundbreaking scientific advancements. These songs manifested exaggerated versions of everyday life while framing positive and negative visions of technology, including the world-changing science that emerged from the Lab's inception.

"Music gave expression to society's collective anxiety, fear, and hope in a very uncertain age," said LANL Historian Roger Meade. "By extension, pop culture provides us with a better understanding of how we evolved as a society after World War II."

Novelty physics songs — and the actual science behind them — are part of the collections of the National Security Research Center, the Lab's classified library. The NSRC also curates unclassified legacy materials from Los Alamos history, in addition to tens of millions of classified documents, films, books, and other media related to the nuclear weapons program.

Here's a collection of ways in which science that originated at Los Alamos National Laboratory impacted Atomic Age music.

The Atomic Bomb

The world's first atomic bombs were [secretly created](#) by Lab scientists in just 27 months in a perceived race with Nazi Germany. The American public, "reacted to the atomic bomb with a strange mixture of fear, fantasy and frivolity. This reflected the uneven knowledge of what nuclear warfare actually entailed," according to Tim and Joanna Smolko in *Atomic Tunes*.

Music genres viewed the atomic bomb through different lenses. Generally speaking, country music brought a patriotic viewpoint to atomic science and used atomic power as a metaphor for God's power;

folk music objected to nuclear weaponry and cautioned against atomic power; the blues emoted the Cold War frustrations of everyday folks; jazz used “atomic” as a synonym for “mind blowing” and steadily took a wary stance on nuclear technologies; and rock and roll emphasized youthful energy, irreverence and a dark humor.

Songs include

- “Atomic Cocktail,” Slim Gaillard (1945)
- “Atomic Power,” Buchanan Brothers/Fred Kirby (1946)
- “When They Found the Atomic Power,” Hawkshaw Hawkins (1947)
- “You Hit Me like an Atomic Bomb,” Fay Simmons (1954)

Retired Los Alamos weapons scientist Glen McDuff has seen more concerts than can be recounted (including Elvis and Little Richard). Asked about atomic platters, McDuff said, “I think people were seriously concerned about nuclear war and music was one thing that made them less fearful.”

Uranium mining

After [WWII ended](#), Lab scientists continued to create and act as a steward of the nuclear stockpile. Procurement of uranium was necessary and the Atomic Energy Commission (AEC) promoted mining uranium ore to build the nation’s reserve. In 1949, the AEC published [Prospecting for Uranium](#) and “uranium fever” lasted through the decade. Trade magazines like *Popular Electronics* [dedicated issues to uranium prospecting](#) and songs shifted from Cold War concerns to commerce:

- “Uranium,” Commodores (1952)
- “Uranium Fever,” Elton Britt (1955)
- “Uranium Rock,” Warren Smith (1958)

The Hydrogen Bomb

Early Los Alamos scientists Edward Teller and Stanislaw Ulam designed the first hydrogen bomb, representing the second generation of nuclear weapons design following WWII. The hydrogen bomb was tested in 1952 during the Operation Ivy test series. The weapon’s yield was over 500 times that of Fat Man, the atomic bomb released above Nagasaki.

Songs about the H-bomb include

- “The Hydrogen Bomb,” Al Rogers and His Rocky Mountain Boys (1954)
- “Thirteen Women (And Only One Man in Town),” Bill Haley and His Comets (1954)
- “B-Bomb Baby,” The Jewels (1956)
- “Fifty Megatons,” Sonny Russell (1963)

Americans began their musicological engagement with nuclear weapons with trepidation and admiration, but according to Charles K. Wolfe in *Country Music Goes to War*, “As new and more powerful weapons systems were developed in the 1950s – weapons like the hydrogen bomb – the word ‘atomic’ began to lose its connotation of ultimacy. It began to appear less in country or pop songs.”

The Space Race

Though Americans became accustomed to the idea of nuclear weapons by the mid-1950s, it didn’t make the burgeoning Cold War between the United States and the Soviet Union any less disquieting.

One arm of the Cold War, the Space Race, focused on achieving superior spaceflight capabilities to buffer national security. In 1955, Los Alamos scientists began Project Rover, a nuclear rocket delivery system for a hydrogen bomb. Two years later, the Soviets announced the first successful satellite launch, Sputnik 1. Then, in 1961, President John F. Kennedy addressed a joint session of Congress with his “Moon Shot” speech, declaring that the United States would send an American to the moon. Two years later, Lab scientists launched [Vela](#), a suite of satellites able to detect nuclear detonations.

When the American public and Lab scientists had their eyes on the sky, musicians wrote songs like:

- “Satellite Baby,” Skip Stanley (1957)
- “Sputnik Baby,” Roosevelt Sykes (1957)
- “Sputniks and Mutniks,” Ray Anderson and the Homefolks (1958)
- “Rocket to the Moon,” Sheldon Allman (1960)

A societal shift

As the 1960s advanced, the U.S. media focused on tensions related to civil rights, women’s rights, what is today known as LGBTQ+ rights and conflict in Southeast Asia (that became the Vietnam War). With the signing of the Partial Test Ban Treaty in 1963, nuclear weapons testing went underground. Atmospheric, underwater and outer space detonations were prohibited. During this societal and nuclear testing shift, American popular music focused more on the rights of citizens, anti-war protests and the counterculture and less on atomic power.

Want more on atomic pop culture and the influence of science and the Lab? Read about atomic movies and be on the lookout for atomic comic books.

Box:

You can read more stories, listen to podcasts and watch videos about LANL’s fascinating history at nsrc.lanl.gov.

Need assistance with research or digitization? Email the National Security Research Center at nsrc@lanl.gov.

IMAGES -- All images from NSRC collections



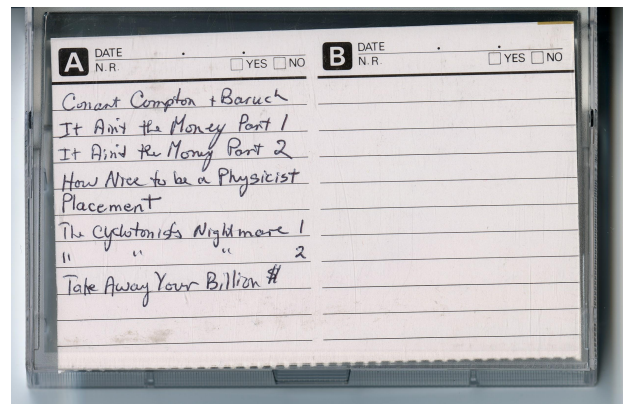
CAPTION: Operation Crossroads inspired the 1947 song “There’s a Power Greater than Atomic,” sang by the Buchanan Brothers and written by Whitey and Hogan. In *Country Music Goes to War*, Hogan said, “We got to thinking about it when they had that big test out in the Pacific; those ships still standing after the blast, that’s what gave us the idea.”

CERTIFICATE LINK:

<https://drive.google.com/file/d/1vmY2DFf7f4nrZ1xUKqrgEYxmidv899Ey/view?usp=sharing>

MUSHROOM CLOUD LINK:

<https://drive.google.com/file/d/1Jce64SoPC-P7NQmtxe3Gcd6TmKIC4YFG/view?usp=sharing>



CAPTION: This gathering of science-inspired novelty songs was originally recorded by scientists/musicians in the physics department at the State University of Iowa in 1947. “It Ain’t the Money (Part 1 & 2)” is about Isidor I. Rabi being awarded the 1944 Nobel Prize in Physics. Rabi helped create the world’s first atomic bombs. This cassette tape is part of the collections in the Lab’s National Security Research Center and its songs can be heard [here](#) and [here](#).

LINK SIDE A:

<https://drive.google.com/file/d/1Nt5GN0Y5D3pTT2ffOIN3YrJXkgf1ZitA/view?usp=sharing>

LINK HANDWRITTEN SONG NAMES:

<https://drive.google.com/file/d/1k8E8U4R6YHfAVrKef1vj8mFhBBcaLNik/view?usp=sharing>



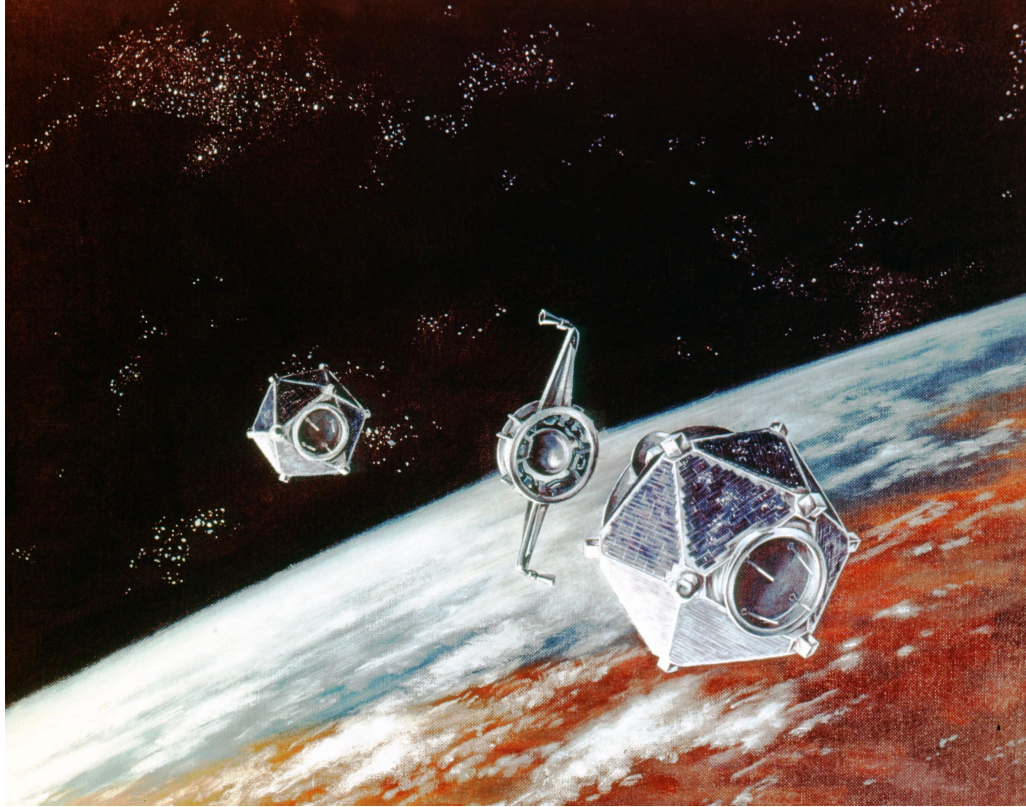
CAPTION: The mushroom cloud from Ivy-Mike, the first full-scale test of a hydrogen bomb during the 1952 Operation Ivy test series. It’s large yield inspired songs like Sonny Russell’s “[Fifty Megatons](#).”

LINK: <https://drive.google.com/file/d/18quDN-QNuAtM29nK4zh4DUfJ-dT1v0fL/view?ts=615dedd7>



CAPTION: Los Cuatros was a band that played in Los Alamos during the Manhattan Project. The June 25, 1945 *Daily Bulletin* announced the band's debut to Lab staff. The members included Ray Gallo (violin), John Michnovicz (accordion), Locky Lockhart (bass), Keith Gard (guitar) and Lois Lockhart (vocals).

LINK: <https://drive.google.com/file/d/18quDN-QNuAtM29nK4zh4DUfJ-dT1v0fL/view?ts=615dedd7>



CAPTION: An October 1964 illustration of Project Vela, a satellite suite that enabled the United States to detect nuclear detonations and thereby monitor compliance to the 1963 Partial Test Ban Treaty. The Space Race between the U.S. and the U.S.S.R. inspired many outer space-themed popular music songs, like Barry Gray's instrumental, "Fireball XL5" which was used as the theme for British 1960s children's show *Fireball XL5*.

LINK: <https://drive.google.com/file/d/10guyLzkqXjxnrNKwGRms7EVYWngaxhtA/view?usp=sharing>



CAPTION: President John F. Kennedy during his 1962 visit to the Lab. Kennedy's Moon landing goal was reached in July 1969. The Space Race that spurred this Moon landing also inspired songs like Sheldon Allman's "Free Fall" and "Flyin' Saucers Rock and Roll," by Billy Lee Riley and His Little Green Men, which included Jerry Lee Lewis on piano.

LINK: <https://drive.google.com/file/d/1gxnfAB7B0LEhT7aZl3IuJU7JUsZppr65/view?usp=sharing>



CAPTION: J. L. Gervais, a disc jockey at WXLG on Kwajalein Atoll in the Pacific, is shown here in his room during Operation Crossroads, which was weapons tests conducted in 1946. WXLG broadcasted news, sports commentary, prerecorded popular entertainment, USO tour interviews, a daily schedule, music and more. Songs like "Atomic Baby" by Amos Milburn were inspired by the Lab's weapons testing. (Photo courtesy of Glen McDuff.)

LINK:

<https://drive.google.com/file/d/1yZ5CxYamMbQWmgmwDKdYFb0SnXVBZikn/view?usp=sharing>

IMAGE LA-UR: LA-UR-21-30377

Here is the Spotify playlist link:

<https://open.spotify.com/playlist/3pqapowl62JPIPL5V5SQJC?si=6bc71bba19dd410b>

And embed code:

Big (shows song titles to scroll through):

```
<iframe
src="https://open.spotify.com/embed/playlist/3pqapowl62JPIPL5V5SQJC?utm_source=generator"
width="100%" height="380" frameBorder="0" allowfullscreen="" allow="autoplay; clipboard-write;
encrypted-media; fullscreen; picture-in-picture"></iframe>
```

Compact:

```
<iframe  
src="https://open.spotify.com/embed/playlist/3pqapowl62JPIPL5V5SQJC?utm_source=generator"  
width="100%" height="80" frameBorder="0" allowfullscreen="" allow="autoplay; clipboard-write;  
encrypted-media; fullscreen; picture-in-picture"></iframe>
```

A few notes on the playlist:

- Patty Templeton's personal Spotify was used to make the playlist.
- Patty used a public domain image for Civil Defense for the playlist cover image.
- Not all songs were available on Spotify. If a song by a certain artist wasn't available but an era appropriate cover was, Patty put the cover on the list.
- Patty put songs mentioned in image captions on the playlist. (Though there is one link in a caption to a YouTube version since it is a great song and not available on Spotify.)